



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/525,412	03/15/2000	Steve Sheppard	6019.3027	1259
26853	7590	01/21/2004	EXAMINER	
COVINGTON & BURLING ATTN: PATENT DOCKETING 1201 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20004-2401			BELIVEAU, SCOTT E	
			ART UNIT	PAPER NUMBER
			2614	20
DATE MAILED: 01/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/525,412	SHEPPARD ET AL.
Examiner	Art Unit	
Scott Beliveau	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 17 December 2003.
- 2a) This action is FINAL.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 54 and 58 is/are allowed.
- 6) Claim(s) 1-53 and 55-57 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \*    c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
 a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,7,16.
- 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Information Disclosure Statement***

1. With respect to applicant's request pertaining to the non-receipt of the initialed IDS papers, such documents for the IDS statements submitted to date (Paper No. 2, 7, and 16) should be attached to this action. The examiner was unaware that the applicant had not received such information and apologizes for any inconvenience. If such documents are not included in with this action, the applicant is invited to call the examiner at the number listed below for the appropriate copies.

***Specification***

2. The disclosure is objected to because the applicant's newly submitted claim for priority appears to be incorrect with respect to the chain of continuity. It is the examiner's understanding based upon the chain of continuity of record in the Office that the priority claim should read ". . . co-pending U.S. patent application serial no. 09/488,275, filed January 20, 2000, [which was a continuation of U.S. patent application serial no 09/026,036 (now abandoned), filed October 12, 1999], which was a continuing prosecution application of U.S. patent application no. 09/026,036, filed on February 19, 1998 (now US Pat No. 6,317,884) . . ." Appropriate correction is required.

***Priority***

3. As noted in the applicant's response with respect to the examiner's Request for Information, the applicant appears to concur with the examiner's interpretation of the subject

matter disclosed in Swisher et al. reference vis-à-vis the Eames et al. reference upon which priority is derived. Accordingly, the priority derived from the Eames et al. reference includes subject matter pertaining to the configuration of the residential gateway (Figures 1-4), but does not provide priority as to the interconnection/installation of the gateway illustrated in Figures 3-5 of the Swisher et al. reference as noted in the prior action. Claims 1-4, 18-21, 35, 39-41, and 44 shall receive the benefit of the filing date of the Provisional Application No. 60/038,276 of 19 February 1997 and claims 5-17, 22-34, 36-38, 42-43, and 45-58 are accorded with the filling date of the instant application or 15 March 2000.

*Response to Arguments*

4. With respect to the OFFICIAL NOTICE statements originally presented in rejection of 31 January 2003 pertaining to the usage of “433 Mhz” in conjunction with the distribution of “UHF signals” and pertaining to extracting channel select commands as a “1 kHz signal”, the claims for which OFFICIAL NOTICE was taken were never indicated as being allowable by the examiner nor were they traversed by the applicant. The examiner acknowledges the applicants remarks, however, to adequately traverse the Examiner’s assertion of Official Notice, an applicant must specifically point out the supposed errors in the Examiner’s action, which would include stating why the noticed fact is not considered to be common knowledge or well known in the art. See 37 CFR 1.111(b). As no such statement/remarks were provided in response to the Non-Final rejection of 31 January 2003 or the response to the Non-Final rejection of 18 July 2003, the OFFICIAL NOTICE statements previously presented are taken as an admission of the fact noted.

5. The OFFICIAL NOTICE presented in the previous Office Action stating that the use of diplex filters is notoriously well known in the art was not traversed and is accordingly taken as an admission of the fact noted.
6. The OFFICIAL NOTICE presented in the previous Office Action stating that the equivalence of “UHF” and IR for their use in the remote controller art and the selection of any of these known equivalents to remotely control or signal a television would be within the level of ordinary skill in the art was not traversed and is accordingly taken as an admission of the fact noted.
7. The OFFICIAL NOTICE presented in the previous Office Action stating that the use of that the use of “baluns” is notoriously well known in the art was not traversed and is accordingly taken as an admission of the fact noted.
8. Claims 1, 18, 20, 35, and 45 were provisionally nonstatutory double patenting rejected in the previous Office Action. The examiner acknowledges the applicant’s remarks pertaining to the filling of terminal disclaimer as necessary should the cited co-pending applications be in condition for allowance if and when the instant application is also in condition for allowance. Accordingly, the rejections are repeated in this action.
9. Applicant’s arguments filed 17 December 2003 have been fully considered but they are not persuasive with respect to the rejection of claims 1, 3-7, 13-14, 18, 20-24, 31, 35, 37-43, and 45-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Ehreth (US Pat No. 6,286,142).

In response to applicant’s arguments as illustrated in Figure 1, the Ehreth reference discloses a “gateway” that is operable to “process the video signal to produce at least one

television signal corresponding to the at least one channel select command" (Col 3, Lines 35-50; Col 4, Lines 45-62). For example, in operation a viewer via a remote controller [70] selects a particular channel to view (ex. channel 5), the controller [30] modulates the channel select command onto a particular upstream frequency which is received by the "gateway" [30]. The "gateway" [30] subsequently modulates selected video associated with the "channel select command" for distribution to the requesting television. As illustrated in Figure 1, the embodiment is operable with "plurality of remote control devices" [70] each of which is associated with "at least one television" [100] (Col 5, Lines 31-43). Accordingly, "channel select commands" are "transmitted . . . directly to a receiver" [80] within the "residential gateway" [30] (Col 3, Lines 2-5) via the distribution network [90].

No further arguments were presented in conjunction with claims 3-7, 13, and 14.

In response to applicant's argument that the references fail to show certain features of applicant's invention with respect to claim 18, it is noted that the features upon which applicant relies (i.e., that video signals are received by a residential gateway in response to a channel select command) are not recited in the rejected claim(s). The claim merely recites that the video signals correspond to the channel select command. It is the examiner's opinion that the "channel select commands" clearly "correspond" to the video signals received by the "gateway" wherein a user requests video from a particular channel which is subsequently provided. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

No further arguments are presented with respect to claims 20-24 and 31.

With respect to applicant's arguments pertaining to the Ehreth reference failing to disclose or suggest "transmitting the at least one channel select command to [a] telecommunications network", the reference discloses that the "gateway" is operable to receive only those signals requested by the "gateway" [30] (Col 3, Lines 9-17) via the "telecommunication network" [40] (Col 1, Lines 44-47) wherein those video programs/channels correspond to those currently desired by the viewers (Col 2, Lines 36-42). Accordingly, it is the examiner's interpretation that the limitation is met wherein the delivery of video information/channel select commands as "requested" by the user is subsequently transmitted upstream via the "telecommunication network" [20] for the delivery of such "requested" information to the "gateway" [30].

No further arguments are presented with respect to claims 37-43.

With respect to claims 45-47, as illustrated in Figure 1, the embodiment discloses the particular usage of "wireless remote controls" [70] using IR or other signal transmission means (Col 4, Lines 5-12) that are operable to "transmit channel select commands" to "remote antennae packages" [50] (Col 4, Lines 13-23) connected to a "television" [100] (Col 3, Lines 51-54). It is the examiner's opinion that the "remote antennae packages" [50] of Ehreth meet the claimed limitations for the recited element.

10. With respect to claims 8-12, 25-30, 36, and 44 rejected under 35 U.S.C. 103(a) as being obvious over Ehreth, no further arguments are presented in conjunction with these claims over and above the arguments of corresponding independent claims 1, 18, and 35.

11. Applicant's arguments filed 17 December 2003 have been fully considered but they are not persuasive with respect to the rejection of claims 5, 7, 11-17, 22, 29-30, and 32-34 under Swisher et al.

In particular, as a result of the split priority of the claims the Swisher et al. reference does not qualify as prior art with respect to the stand alone independent claims, however, as the reference qualifies as prior art in view of the claims 5, 7, 11-17, 22, 29-30, and 32-34 as these claims taken in combination with the independent claims were not previously disclosed. For example, the subject matter of claims 1-4 is addressed in the two paragraph preceding grounds of rejection of claims 5 and 7.

12. Applicant's arguments filed 17 December 2003 have been fully considered but they are not persuasive with respect to the rejection of claims 47-53 and 55-57.

As confirmed by the applicant's remarks in response to the prior Office Action as well as the new declarations supplied by the applicant's, the inventive entity of the claimed subject matter of the instant application is now Steven Sheppard, William Weeks, Charles Eldering, and Thomas Eames. The inventive entity of the Eames et al. ('884) patent is Charles Eldering and Thomas Eames. Applicant's remarks, however, appear to insinuate that the subject matter of claims 47, 50, and 57 was invented solely by Thomas Eames and Charles Eldering (Page 25, Lines 3-14). In any event, the subject matter associated with both the Swisher et al. and the Eames et al. references are not the applicant's own work but are rather "by another" absent an appropriate showing.

With respect to claim 47, as noted in the prior action the priority for the instant application derived from the Eames et al. ('884) reference does not extend to claim 47. In

particular, the subject matter disclosed in Figures 6 and 7 of Eames et al. used in conjunction with the rejection was disclosed nor incorporated by reference into the instant application. Rather, the rejection of claim 47 was based on the combined elements from both the Swisher et al. and the Eames et al. ('844) references (ex. see Claim 22 re: media interface device").

With respect to independent claims 50 and 57 and dependent claims 48-47, 51-53, and 55-56, the subject matter of the Eames ('884) upon which priority is derived does not disclose the claimed elements accordingly; as such these claims do not receive the benefit of the earlier filling are rejected under Swisher et al.

13. With respect to claims 2, 19, and 32-34 rejected under 35 U.S.C. 103(a) as being obvious over Ehreth in view of Hamlin (US Pat No. 5,574,964), arguments presented in conjunction with independent claims 1 and 18 are not persuasive as aforementioned.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine is found in both the references as well as knowledge generally available to one of ordinary skill in the art. With respect to the existence of a "residential gateway" [30] that further includes an IR or "optical receiver", such an embodiment is illustrated in conjunction with Hamlin (Col 6, Lines 8-13).

Accordingly, it would have been obvious to modify the Ehreth embodiment to include such

Application/Control Number: 09/525,412

Art Unit: 2614

for the purpose of facilitating the operation of a "television located in close proximity to the residential gateway" [100] that does not accept IR commands and/or to further provide a means by which anyone within operational radius may control or program the signal distribution system (Hamlin: Col 5, Lines 31-45) and to further provide versatility, and mobility while communicating with the gateway.

***Double Patenting***

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1, 20, and 45 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1, 9, and 30 of co-pending Application No. 09/526,100. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences between the two are either encompassed within the claim of the instant application or are comprise a minor rewording of limitations. For example, claim 45 of the instant application recites the limitation of “wireless remote control devices” wherein the co-pending application references “optical remote control devices”. In the context of the instant application, “wireless remote control devices” may comprise either UHF or IR (optical) based “remote devices.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Claims 18 and 35 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 16 and 31 of co-pending Application No. 09/488,275. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences between the two are encompassed within the scope of the claims of the instant application. In particular, the claim 18 of the instant application recites a “video processor for processing video signals” wherein the co-pending application recites that the “video processors” decode or “construct at least one series of video packets” to form “at least one television signal”. The instant application defines steps for the “processing video signals” to comprise the “constructing” limitation cited in the co-pending application (IA: Page 16, Lines 8-11).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

18. Claims 1, 3-7, 13-14, 18, 20-24, 31, 35, 37-43, and 45-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Ehreth (US Pat No. 6,286,142).

In consideration of claim 1, the Ehreth reference discloses a method of “receiving, decoding, and distributing video from a telecommunications network” [40] (Col 1, Lines 44-50) to a “plurality of televisions in at least two separate locations” [100] (Figure 1) via a “residential gateway” [30] (Col 2, Line 59 – Col 3, Line 10). The reference teaches that the “residential gateway” [30] is operable to “receive the video signal from the telecommunications network” (Col 3, Lines 11-34) and to “receive at least one channel select command” [80] from a “remote control device” [70]. Subsequent to the “select command” the “residential gateway” [30] is operable to “transport the video signal over a video bus” wherein it is “processed” [34] (Col 3, Lines 34-50) and “transmitted” to the aforementioned “plurality of televisions” [100] (Col 4, Lines 44-62).

Claim 3 is rejected wherein the device is further operable to receive “channel select commands” from IR “wireless remote control devices” [70] located “remotely from the residential gateway” as illustrated in Figure 1 (Col 3, Line 65 – Col 4, Line 12).

Claim 4 is rejected wherein the disclosure teaches that the “wireless remote control devices” [70] may further transmit “channel select commands” to “remote antennae packages” [50]. The aforementioned “remote antennae packages” [50] subsequently “transmit the wireless signals from the remote antennae packages to the residential gateway to the residential gateway over media” (Col 3, Lines 2-5; Col 4, Lines 13-43).

Claim 5 is rejected wherein the “residential gateway” [30] further serves as a “media interface device” in so far as it serves as the “interface” for the distribution of signals between the in-home wiring [90] and the telecommunications network [40]. The claim is not necessarily limiting with respect to the “residential gateway” not being further interpreted as a “media interface device”. Accordingly, the “media interface” is operable to “receive” and “extract” the “channel select commands” and subsequently “transmit” the aforementioned commands to “a remote control processor” [80] (Col 4, Lines 44-62).

Claim 6 is rejected wherein the “media is coaxial cable” and the aforementioned “media interface device” is subsequently a “coaxial interface device” (Col 3, Lines 51-54).

Claim 7 is rejected wherein the “media interface device” [30] may further comprise a “remote antenna module” [80].

Claim 13 is rejected wherein as aforementioned “at least one television signal” [40] is “transmitted” to and “processed” by a “media interface device” [30] for “at least one television” [100].

Claim 14 is rejected wherein the embodiment further comprises a “splitting” the aforementioned “at least one television signal” so as to “transmit” the television signal to “separate locations” based on the requested program (Col 5, Lines 15-29).

Claim 18 is rejected wherein as aforementioned in the rejection of claim 1, the Ehret reference discloses a “residential gateway” [30] that is operable to distribute video signals to “plurality of televisions in at least two separate locations” [100] (Figure 1) (Col 2, Line 59 – Col 3, Line 10). As illustrated in Figure 1, the “residential gateway” comprises a “receiver” [80], a “network interface module” [32], a “video processor” [32] and a “video bus” that connects the various components within the “residential gateway” [30].

Claim 20 is rejected wherein the “residential gateway” [30] further comprises a “remote control module” [80] (Col 4, Line 44 – Col 5, Line 14).

Claim 21 is rejected wherein Figure 1 illustrates “remote antennae packages” [50] in close proximity to and coupled to television which “receives wireless signals” from the “wireless remote control devices” [70] and subsequently inherently “modulates the wireless signal” for transmission over “media” [90] to the “residential gateway” [30] (Col 4, Lines 24-43).

Claim 22 is rejected wherein the “residential gateway” [30] comprises a “media interface device” [80] that couples the external telecommunication network [40] to the “remote control antennae packages” [50] via the internal “media” [90]. As aforementioned, the “media interface device” [80] “receives” and “extracts” the “channel select commands” (Col 4, Lines 44-62).

Claim 23 is rejected wherein the “media is coaxial cable” and the aforementioned “media interface device” is subsequently a “coaxial interface device” (Col 3, Lines 51-54).

Claim 24 is rejected wherein the “media interface device” [80] may further comprise a “remote antenna module” that is operable to “extract channel select commands”.

Claim 31 is rejected wherein the aforementioned “media interface device” [80] is “directly connected” to or embedded within the “residential gateway” [30] (Col 4, Lines 48-51).

Claim 35 is rejected wherein the Ehreth reference illustrates a “method of receiving and decoding signals” from a “telecommunications network” [40] and transmitting the signals from the “residential gateway” [30] to a “plurality of devices” [100]. As illustrated, the “residential gateway” [30] serves to connect each of the plurality of devices and the telecommunications network”. The “residential gateway” [30] is operable to “receive” [32] a video signal from the telecommunications network [40] and “channel select commands” from a “remote control device” [70] such that the “processing” [80] these commands results in the “transmission” of the video signal to the “television [100] (Col 1, Line 44 – Col 2, Line 5).

Claim 37 is rejected wherein the aforementioned “residential gateway” [30] as illustrated includes connecting televisions [100] remotely located from the “residential gateway” [30] via “remote antennae packages” [50]. The “residential gateway” [200] further comprises a “media interface device” [80] connected to the “residential gateway” which interfaces with “media” [90] to retrieve signals from the “remote antennae packages” [50].

Claim 38 is rejected wherein the aforementioned “media interface device” [80] is “directly connected” to or embedded within the “residential gateway” [30] (Col 4, Lines 48-51).

Claim 39 is rejected wherein the “residential gateway” [30] is further operable to receive [80] “channel select commands” from an IR or “optical remote control devices” [70] located “remotely from the residential gateway” as illustrated in Figure 1 (Col 3, Line 65 – Col 4, Line 12; Col 5, Lines 15-29). The claim does not specify that the “receiver” [80] necessarily receives the signal as an optical signal.

Claim 40 is rejected as aforementioned with respect to claim 39 wherein an IR remote is a “wireless remote control device” [70].

Claim 41 is rejected wherein the disclosure teaches that the “wireless remote control devices” [70] may further transmit “channel select commands” to “remote antennae packages” [50]. The aforementioned “remote antennae packages” [50] subsequently “transmit the wireless signals from the remote antennae packages to the residential gateway over media” (Col 4, Lines 13-23).

Claims 42-43 are rejected wherein as aforementioned the “wireless signals” from the “remote antenna packages” [50] are transmitted over the “media” [90] to the “media interface device” [80]. The “channel select commands” are subsequently “extracted” by a “remote antennae module” [80] and “transmitted” to the “remote control processor” [34] which modulates the signals for distribution (Col 3, Lines 40-46).

Claim 45 is rejected wherein Figure 1 of the Ehreth reference illustrates a “method of receiving and decoding signals” from a “telecommunications network” [40] using a

“residential gateway” [30]. The “residential gateway” [30] is “connected to the telecommunications network” [40] and to a “plurality of devices” [100]. The “residential gateway” [30] is operable to “receive” and “process” [80] “channel select commands” from “wireless remote control device” [70] which “transmit channel select commands as wireless signals” to “remote antennae packages” [50] (Col 1, Line 44 – Col 2, Line 5).

Claim 46 is wherein the “residential gateway” [200] of the Ehreth reference comprises a “network interface module” [32], a “video processor” [30], and a “remote control module” [80]. The reference teaches that the “remote control module” [80] receives “channel select commands” which are “extracted” from the “media” [90]. These commands are modulated onto the media via “remote antenna packages” [50].

Claim 47 is rejected as aforementioned in the rejection of claim 46 wherein the “residential gateway” [30] of the Ehreth reference comprises a “network interface module” [32], a “video processor” [30], a “remote antennae packages” [50], and a “media interface device” [80] for inherently “demodulating” and “extracting” the “channel select command” and “transmitting” it to the “remote control module” [34] of the “residential gateway” [30].

19. Claims 5, 7, 11-17, 22, 29-30, 32-34, 47-49, 50-53, and 55-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Swisher et al. (US Pat No. 6,418,149).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from

the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Figure 3 of the Swisher et al. reference illustrates a method of “receiving, decoding, and distributing video from a telecommunications network” [180] to a “plurality of televisions in at least two separate locations” [197/198/199] via a “residential gateway” [200]. The reference teaches that it is operable to “receive at least one channel select command” from a “remote control device” [500/700] (Col 5, Lines 51-67 – Col 6, Lines 1-3) and to subsequently “transmit” the video signal (Col 2, Lines 48-55). These “wireless remote control devices” [500/700] (both IR and UHF are wireless based) are located “remotely from the residential gateway, as illustrated in Figures 2B and 2C. Furthermore, they are operable to transmit “channel select commands” to “remote antennae packages” [710], which subsequently “transmit the wireless signals from the remote antennae packages to the residential gateway to the residential gateway over media” (Col 5, Lines 56-67 – Col 6, Lines 1-3).

As to the recited limitation wherein signal is “transported” over a video bus for “processing”, the Swisher et al. reference expressly incorporates the Eames et al. (US Pat No. 6,317,884) teachings pertaining to the “residential gateway” [200] (Col 5, Lines 26-33). As illustrated in Figure 6 of the Eames et al. reference, the “residential gateway” [200] comprises a “video bus” [429] and a “processor” [430] (Col 7, Lines 3-12).

In consideration of claims 5 and 7, the Swisher et al. reference teaches that the aforementioned “residential gateway” [200] may require additional components to utilize the in-house wiring illustrated in Figures 2C. The “residential gateway” embodiment of Figure 6

corresponds to this wiring arrangement (Eames et al.: Col 7, Lines 26-35). The claim language may be broadly interpreted such that the “media interface device” is the collection of components that are necessary to facilitate the point-to-point in-home coaxial wiring installation outlined in Swisher et al. Subsequently, the “media interface device” comprises a “remote antenna device” [620] that is operable to “receive” and “extract” the “channel select commands” (Swisher et al.: Col 6, Line 49 – Col 7, Line 20) wherein the aforementioned commands are subsequently “transmitted” to “a remote control processor” [472] (Eames et al.: Col 7, Lines 16-25).

Claim 11 is rejected wherein the method further comprises the use of a “diplexer” [620] to further extract “other signals” (Col 6, Lines 37-55).

Claim 12 is rejected wherein the method further comprises the use of a “balun” [622] for “adjusting the impedance” (Col 8, Lines 23-32).

Claim 13 is rejected wherein as illustrated in Figure 3 “at least one television signal” is “transmitted” and “processed” to “at least one television” [197/198/199].

Claim 14 is rejected wherein the embodiment further comprises a “splitter” [662] so as to “transmit” the television signal to “separate locations” (Col 7, Lines 41-49)

Claim 15 is rejected wherein the embodiment further comprises a “diplexer” [620] that is operable to “diplex other signals onto the media with the at least one television signal” (Col 7, Lines 61-64).

Claim 16 is rejected wherein the “processing” includes changing the “impedance of a subset of the other signals” through the use of a balun [622].

Claim 17 is rejected wherein the “television signals” are “combined” [650] prior to being “split” [652] for reception by the televisions [197/198] as illustrated in Figure 3.

Claim 22 is rejected wherein Figure 2C of the Swisher et al. reference illustrates “remote antennae packages” [710] in close proximity to and coupled to television which “receives wireless signals” from the “wireless remote control devices” [700] and subsequently inherently “modulate the wireless signal” for transmission over “media” [171] to the “residential gateway” [200] (Col 5, Lines 63-67 – Col 6, Lines 1-3). As aforementioned, the claim language may be broadly interpreted such that the “media interface device” is the collection of components that are necessary to facilitate the point-to-point in-home coaxial wiring outlined in Swisher et al. Subsequently, the “media interface device” comprises a “remote antenna device” [620] that is operable to “receive” and “extract” the “channel select commands” in conjunction with other RF signals (Swisher et al.: Col 6, Line 49 – Col 7, Line 20).

Claim 29 is rejected wherein the method further comprises the use of a “diplexer” [620] to further extract “other signals” (Col 6, Lines 37-55)

Claim 30 is rejected wherein the method further comprises the use of a “balun” [622] for “adjusting the impedance” (Col 8, Lines 23-32).

Claims 32-34 are rejected wherein the “residential gateway” [200] utilized by Swisher et al. is illustrated in Eames et al. The “residential gateway” [200] illustrated in Figure 6 is operable to distribute video signals to “plurality of televisions in at least two separate locations” [199] (Figure 5). As illustrated in Figure 6, the “residential gateway” comprises a “receiver” [470/472], a “network interface module” [410], a “video processor” [430] and a

“video bus” [429]. The aforementioned embodiment comprises an “optical receiver” [472] (Eames et al.: Figure 6) and the “media interface device” includes a “splitter” [652] and a “combiner” [650].

Claim 47 is rejected wherein the “residential gateway” [200] of the Eames et al. reference illustrated in Figures 6 and 7 comprises a “network interface module” [410], a “video processor” [430], a “remote antennae package” [710], and a “media interface device” [620] for extracting the “channel select command” and “transmitting” it to the “remote control module” [422] of the “residential gateway” [200].

Claim 48 is rejected wherein the “media interface device” further comprises a “remote antennae module” [620], a “splitter” [652], a “balun” [622], and a “diplexer” [620].

Claim 49 is rejected wherein the “media interface device” further comprises a “combiner” [650] (Col7, Lines 28-36), and a “splitter” [652] (Col 7, Lines 41-49)

In consideration of claims 50 and 56, the system comprising the “residential gateway” [200] and associated components illustrated in Figure 3 are interpreted as comprising a “media interface device” as it is operable to support the “directional direction of signals to multiple devices over a media”. The limitations of the claim are met as follows:

- a “first connector” [652] for receiving a “TV signal” in the direction of heading away from the “residential gateway” [200];
- a “second connector” [622] for receiving an upstream network signal away from the “residential gateway” [200] and transmitting a “downstream network signal” towards the “residential gateway” [200];

- a “third connector” [610] for transmitting the “TV signal” and the “upstream network signal” away from the “residential gateway” [200] and receiving the “downstream network signal” and “wireless signal” in the direction of the “residential gateway”;
- a “diplexer” [620] for extracting the “network signal from the media” in the direction towards the “residential gateway” [620];
- a “remote antenna module” or “fourth connector” [620] for receiving the “wireless signal”, extracting the “channel select command”, and transmitting it towards the “residential gateway” [200].

Claim 51 is rejected wherein the “media interface device” comprises a “balun” [622].

Claim 52 is rejected wherein the embodiment includes a “splitter” [652] wherein the “splitter” comprises a “fifth connector” for “transmitting one of the two identical “first signals” in the “first direction” or towards TV3 [198] via the media [646].

Claim 53 is rejected wherein the aforementioned further comprises a “combiner” [650].

Claim 55 is rejected as aforementioned wherein the aforementioned “media interface device” is “directly connected” to or embedded within the “residential gateway” [200] and is further operable to distributes signals between the multiple devices and the telecommunications network as illustrated in Figures 1 and 2.

Claim 57 is rejected in view of Figure 3 of the aforementioned Swisher et al. reference.

The claimed “media interface” is met wherein the Figure comprises “a first connector” [610], a “second connector” [474] (Eames et al: Figure 6), a “third connector” [650], a “diplexer”

[620], a “balun” [622], and a “remote antennae module” [640] that is connected to the “diplexer” [620] (Eames et al.: Figure 6).

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

22. Claims 2, 19, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth (US Pat No. 6,286,142), in view of Hamlin (US Pat No. 5,574,964).

In consideration of claims 2 and 19, the Ehreth reference does not explicitly disclose nor preclude that the “receiving at least one channel select command” may not be further conducted via an “optical receiver within the residential gateway”. The use of “optical receivers” is notoriously well known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art to modify “residential gateway” [30] to further include an IR

or “optical receiver” for the purpose of advantageously facilitating the operation of a “television located in close proximity to the residential gateway” [100] that does not accept IR commands.

Alternatively, the Hamlin reference discloses a system including a “gateway” that includes an “optical receiver within the residential gateway” [40] (Col 6, Lines 8-13). Accordingly, it would have been obvious to one of ordinary skill in the art to modify the Ehreth “gateway” [30] to further include an “optical receiver within the residential gateway” for the purpose of providing a means by which anyone within operational radius may control or program the signal distribution system (Col 5, Lines 31-45) and to further provide versatility, and mobility while communicating with the gateway.

Claim 32 is rejected wherein the embodiment further comprises a “media interface device” [32/34] for “processing the at least one television signal” and “transmitting the processed television signal to the at least one television”. Both the “network interface” [32] and the “modulating unit” [34] interface with the distribution media [20/90].

Claim 33 is rejected wherein the embodiment further comprises a “splitting” the aforementioned “at least one television signal” so as to “transmit” the television signal to “separate locations” based on the requested program (Col 5, Lines 15-29).

Claim 34 is rejected wherein the aforementioned device comprises a “combiner” [34] that is operable to modulate onto any one of a plurality of downstream RF channels for appropriate distribution over a common medium [90] (Col 3, Lines 40-46).

23. Claims 8-12, 25-30, 36 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehreth (US Pat No. 6,286,142).

In consideration of claims 8 and 25, the Ehreth et al. reference discloses that the “wireless remote control devices” may utilize IR signaling or other suitable signal transmission media for entering user input information. The reference subsequently discloses the claimed invention except for the “wireless remote control devices” utilizing UHF as opposed to IR. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to utilize UHF signals since the examiner takes OFFICIAL NOTICE of the equivalence of “UHF” and IR for their use in the remote controller art and the selection of any of these known equivalents to remotely control or signal a television would be within the level of ordinary skill in the art.

In consideration of claims 9 and 26, the Ehreth et al. reference does not explicitly disclose the frequency utilized in conjunction with upstream signaling. It is notoriously well known in the art to utilize “433 Mhz” in conjunction with the distribution of “UHF signals”. Accordingly, it would have been obvious to one of ordinary skill in the art to “transmit” the UHF signals at “433 MHz” for the purposes of using a standard transmission frequency that is commonly utilized in the transmission of signals from “wireless remote controls”.

In consideration of claim 10, the Ehreth et al. reference does not explicitly specify the “frequency” wherein channel commands are extracted [80]. It is notoriously well known in the art to extract channel select commands as a “1 kHz signal”. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the “remote antennae module” [80], if necessary, to extract the channel select command as a “1 KHz signal” for the purpose of utilizing a simple signaling protocol between the “remote antenna package” [50] and the residential gateway [30].

In consideration of claims 11 and 29, the reference discloses that the embodiment is operable to facilitate bi-directional communications with the “telecommunication network” [40] (Col 3, Lines 11-18) and that the network may transmit both data and video signals (Col 3, Lines 46-60). The reference, however, does not explicitly disclose that the “media interface device” [30] does not further comprise a “diplexer”. The examiner takes OFFICIAL NOTICE that the use of diplex filters is notoriously well known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art to modify the “media interface device” [30] to further comprise provide a “diplexer” for the purpose of ensuring frequency separation between upstream and downstream communications in a manner that further reduces the ingress/egress noise within the system.

In consideration of claims 12 and 30, the reference discloses that the “media interface device” [30] is operable to interface with external transmission media [20] as well as the internal distribution network [90] (Col 3, Lines 18-23). The reference, however, does not explicitly disclose the use of a “balun”. The examiner takes OFFICIAL NOTICE that the use of “baluns” is notoriously well known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the “media interface device” [30], if necessary, to utilize a “balun” for the purpose of ensuring that the impedance of the external network matches that of the internal network as to reduce noise (reflections) introduced into the system due to mismatched media impedances.

Claim 27 is rejected wherein the “remote antennae packages” [50] “modulates the wireless signal” for transmission over “media” [90] to the “residential gateway” [30] based on the user selectable frequency (Col 4, Lines 24-43).

In consideration of claim 28, the Ehreth et al. reference does not explicitly specify the “frequency” wherein channel commands are extracted [80]. It is notoriously well known in the art to extract channel select commands as a “1 kHz signal”. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the “remote antennae module” [80], if necessary, to extract the channel select command as a “1 KHz signal” for the purpose of utilizing a simple signaling protocol between the “remote antenna package” [50] and the residential gateway [30].

In consideration of claims 36 and 44, the Ehreth et al. reference suggests that the distribution network [90] may utilize other transmission media and does not explicitly preclude that the distribution network [90] may not utilize “S-video cables” as are known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art to utilize other media to connect a “television located in close proximity” [100] to the “residential gateway” [30] for the purpose of improving video quality by distributing each of the color components separately.

***Allowable Subject Matter***

24. Claims 54 and 58 are allowed.
25. The following is a statement of reasons for the indication of allowable subject matter:

The applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as the Swisher et al. (US Pat No. 6,418,149) patent at the time this invention was made. Accordingly, the Swisher et al. reference is disqualified as prior art through 35 U.S.C. 102(e), (f) or (g) in any rejection

under 35 U.S.C. 103(a) in this application. The applied art does not qualify as prior art under another subsection of 35 U.S.C. 102 and accordingly is disqualified as prior art under 35 U.S.C. 103(a) and as such cannot be modified so as to incorporate an "X by Y splitter with additional connectors" as is known in the art.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

- The Foley (US Pat No. 6,069,899) reference discloses a home area network system and method that uses existing POTS wiring to network computers in a home without disrupting conventional telephone services.
- The Carhart (US Pat No. 6,622,304) reference discloses a system for permitting an interface between a centralized in-home computing apparatus and a plurality of remotely situated in-home communications stations.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory

Art Unit: 2614

period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 703-305-4907. The examiner can normally be reached on Monday-Friday from 9:00 a.m. - 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 703-305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-HELP.

SEB  
January 7, 2004



JOHN MILLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600